

Statement of The Pacific Forest Trust  
*Submitted to*  
U.S. Senate Committee on Commerce, Science, and Transportation  
Hearing on Climate Change Technology and Policy Options  
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The Pacific Forest Trust (PFT) commends Chairman Hollings and the members of the Commerce, Science and Transportation Committee for addressing the extremely important topic of climate change and policy options to address this growing problem. A variety of actions may be taken to ameliorate global warming, and PFT believes that U.S. forests can and should play a role in this process, as their management and loss contribute to the problem. An effective way that forests may contribute to the solution is in the context of a carbon market.

PFT is a problem-solving nonprofit organization dedicated to the nationwide preservation of privately owned productive forestlands through, among other things, the use of market-based conservation incentives. We collaborate with forest landowners, forest managers, policymakers and the public to ensure that private, working<sup>1</sup> forests are preserved and sustained for all the values that they provide. We support and recommend the establishment of a carbon trading market that includes the forestry sector. Such a market would reward forest landowners for the climate service that their forests provide and encourage owners to keep their forests as forests.

**Background:**

Between 1982 and 1997, the United States lost over 21.5 million acres of private forestlands to other uses. In California alone, over 60,000 acres of forestland were lost annually to non-forest uses between 1992 and 1997. During the same timeframe, Georgia lost almost 60,000 acres of private forestland annually. Similar statistics are reflected among privately owned forestland in the most productive timber areas of the United States. While approximately 22 million acres of forestland have been replanted on public lands, these forests are much younger than the forestland being lost, which means that the nationwide average age of forests in the U.S. is declining.

Over the years, the average age of working forestlands has also become increasingly younger. In large part, this decline in age is due to the increasing need to generate economic returns on shorter and shorter harvest and regeneration cycles. For example, in the Pacific Northwest, the average age of harvest of commercial species has declined

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<sup>1</sup> Working forests are those that undergo harvest and regeneration.

from 80 to 40 years old.

These trends of permanent forest loss and declining forest age signify that the forestlands of the U.S. are a declining carbon sink and contribute significantly to the release of carbon dioxide into the atmosphere. Therefore, they are also contributing to global warming, as carbon dioxide is a greenhouse gas. Forests absorb carbon dioxide from the atmosphere and store it as carbon in their biomass. When forests are converted to other uses, the carbon stored in the forest biomass, is released into the atmosphere both immediately and over time. Thus, the growing loss of private forestland means that declining amounts of carbon are being stored on the ground and significant amounts of carbon are being released into the atmosphere as a result. Even carbon stores in wood products are released over time through decay at an average rate of 2% annually. Likewise, the declining average age of harvest rotations means that less carbon is being stored in forests than in the past, as older forests store more carbon than younger forests. While younger forests may, on average, grow at faster rates than older forests, older forests store more carbon per acre than younger ones.

### **The Benefits of a Forest Carbon Market in the United States**

The establishment of a forest carbon market would create the private financial incentive to conserve forests and prevent carbon loss. A carbon market, whether voluntary or established through regulation, would monetize the carbon stored in forest biomass, as other carbon dioxide emission sectors would seek to meet their emission reduction goals through the purchase of emission offsets or carbon "credits" from entities that are able to provide these credits. Private forest landowners can accommodate buyers by selling their forest carbon stores as credits to buyers and maintaining these forest carbon stores over time, which ultimately means keeping their forests as forests and growing them older. The added carbon value to forestland thus creates a new forest economy.

The inclusion of the forestry sector in a carbon trading market must be done the right way with the right rules, so that real positive impacts are achieved in the atmosphere and on the ground. To ensure the quality of "credits" derived from such actions, a standardized carbon accounting system must be adopted. Such "generally accepted accounting principles," similar to GAAP used by American business, should use annual debits and credits and adjust appropriately for risk. The establishment of broadly accepted rules governing the accounting system will also help ensure that credits developed in the U.S. will be accepted in other carbon markets. Such rules should include the following:

- **Additionality:** Carbon sequestration gains must be *additional* to those that would have accrued from conventional, or "business-as-usual" forest management. This assures net gains in forest carbon stores.
- **Permanence:** To earn credits in the carbon accounting system, forests must be managed for the *permanent* sequestration of carbon. This ensures that tons stored today are not released again and that forest loss is not simply delayed for a time.
- **Verifiability:** The forest carbon accounting system must be accurate and must ensure timely third-party *verification* of forest carbon gains and losses. Without this, carbon credits will lack credibility.
- **Co-benefits:** Forest carbon projects must avoid environmental harm and result in environmental and social co-benefits, such as habitat restoration, biodiversity enhancement, watershed protection and sustainable timber economies. Natural forest management achieves these co-benefits and should be credited, as should reforestation of previously cleared forest areas. On the other hand, since the conversion of natural forest ecosystems (or non-forest ecosystems like wetlands or grasslands) to forest plantations results in loss of environmental values, this activity should not be eligible for credit.

While there has been a growing awareness of the role that forests in the tropics may play in forest carbon transactions, it should be emphasized that such transactions are very feasible in the United States. In fact domestic transactions offer greater security as there is generally more scientific and legal certainty in the United States than there is abroad.

PFT's recent sale of forest carbon credits to the Green Mountain Energy Company is an illustration of a cost-effective and scientifically credible forest carbon transaction in the U.S. Last fall, Green Mountain purchased carbon credits secured by PFT's forestland conservation easements so that they could offset half of their annual operational carbon dioxide emissions. These credits are the result of forest management practices that exceed business as usual practices (i.e. federal state and local land use laws and regulations) and thus, achieve real results in the atmosphere and on the ground. These credits are also permanent, as they represent the permanent storage of additional forest carbon, secured legally by a perpetual conservation easement.

PFT acts as a third party verifier, as we monitor the forestland easements to ensure that landowners comply with the easement terms and forest carbon

stores are additional and permanent. Our monitoring of the easement is based on sound science and reassures Green Mountain of the credibility of their emissions reductions.

A forest carbon market would not only create a new forest economy, but it would also achieve multiple conservation co-benefits. As more forest is preserved and grows older, forest biodiversity is enhanced - making forests more resilient. In addition, older preserved forests provide habitat for endangered species and enhance water quality. Forest landowners would be encouraged to provide these additional conservation benefits if they received an economic benefit in return, and a carbon market can provide such dividends.

Thank you for the opportunity to submit this testimony, and we hope to continue informing this process so that the benefits of a forest carbon market may be realized.